

the form and profile especially is so peculiar, that a glance at the sketch will, by comparison with that of the existing elephant also given, be sufficiently striking.

The suborbital foramen is by no means large; the proportion of diploe in the upper part of the cranium bears no comparison with that in the existing elephant, these differences combined with the peculiarity of form and position of the external nasal aperture, may, in all probability, modify the extent to which this variety of *Mastodon* was provided with trunk; but to forbear from surmises or speculations in the present imperfect state of the inquiry, it will be sufficient to place this as a second to the *angustidens* formerly noted.

P. S.—A letter this moment received from Captain CAUTLEY announces the discovery of a superb specimen of the *Mastodon angustidens*, a skull with both lines of molars, palate, and one orbit entire: he adds—"We have much still to learn of these *Mastodons*; with regard to the *Mastodon elephantoides* of CLIFT, there are evidently two species, of the same character as to dentition, but with a remarkable difference in the form of cranium, one of which has the flat and the other the elevated crown." A very perfect head of a horse has also just been extracted by the *Sewalik* working parties, from the hard sandstone.—ED.

### III.—Additions to the Ornithology of Népal. By B. H. HODGSON, Esq.

#### 1. Indication of a new Genus of Insessorial Birds.

CONIROSTRES, *Sturnidæ*, *Lamprotorninæ*? DENTIROSTRES, *Merulidæ*, *Crateropodinæ*?

In the suite of specimens of Nipalese birds forwarded by me, three years ago, to the Zoological Society of London, were three or four of the subject of the present article. They were marked in the imperfect list obligingly returned to me as "a new form nearly allied to *Pastor*." But, if *Pastor roseus* be the type of that genus, I confess I cannot perceive much affinity with our bird, either in structure or in manners. And, if a strong, arched, solid and compressed bill, united with gradated wings, and very strong feet, be *the* marks of the *Crateropodinæ*, to that sub-family, I conceive that our bird should be referred; the more especially as its shy and retiring habits are alien to those of the whole *Corvidæ*, and in a yet more particular manner, to those of the *Sturnine* branch of it. The Indian *Stares* seem to have perplexed systematists most wofully, though, I fancy, there is not one of us exiles 'in the land of the sun,' but readily

recognises the propriety of the *native* genus *Maina*. All the *Mainas*\* have a preponderant similitude of general structure and of habits, constituting generic unity, if such a thing there be; and placing these birds, in a natural system, close to the European genus *Sturnus* (secundum Linnæum); unless indeed that single genus should not rather embrace the whole of the *Mainas* sub-generically. Yet, according to the latest and most accredited systems, these birds are scattered at random amongst the *Lamprotorninæ*, the *Pastorinæ* and the *Coracianæ*, constituting the Sturnine genera *Dilophus*, *Acridotheres*, and *Pastor*, and the *Corvine* genus *Gracula vel Eulabes*! Should we feel disposed to turn from English to French systems, the matter is no way mended: for CUVIER's *Dentirostral* and *Meruline* *Grakles* are sundered, toto cælo, from his *Conirostral* and *Corvine* *Stares*; and TEMMINCK's *type* of the genus *Pastor* is dissevered widely from all its congeners! If the first men of the age can so err for want of local information†, it is to be hoped that some of them will, ere long, see the necessity of *methodical co-operation* with those who are capable of supplying that information, and who, I will add, are most anxious to supply it, upon fair and gentlemanly terms of participation.

\* We have seven species, all abundant in Nipal.

1. Religiosa.
2. Cristelloides, (nob.)
3. Tristoïdes, (nob.)
4. Sylvestris, (nob.)
5. Affinis, (nob.)
6. Communis, (nob.)
7. Terricolor, (nob.)

Of these, 2 and 3 are very nearly allied to *Cristatella* and *Tristis*; 4 and 5 to *Pagodorum* and *Malabarica*. The 6th inclines much to *Sturnus*; and the 7th, a very osculant species, has very considerable resemblance in the form of its wings, tail and legs, to *Cinlosoma*.

† So subtle and various are the relations of birds to one another, that no success can attend the ambitious project of a *general* classification conformable to nature, unless, to the intimations derived from external structure be added those derivable from internal structure and from habits and manners.

But how shall the most able man of science at home procure an adequate supply of the latter sort of information, unless he will associate to himself some intelligent and persevering local students? Dried skins are but dried skins! And why have we Zoological Societies, unprovided with travelling naturalists, if not to accomplish *some sort* of adequate union between domestic skill and foreign opportunity?

So long as the closet and field departments continue separated, so long will the multiplication of idle names and vague species go on, whilst no effectual progress will be made in the noble attempt at a natural classification.

What adds to my difficulty in attempting to class the birds now in question is, that the so-called *Pastor Traillii* (very abundant in Nepal) is, in my judgment, a typical Oriole; whilst the *Lamprotornis spilopterus* (also common here) is not easily referable to TEMMINCK'S genus *Lamprotornis*.

Mr. SWAINSON, who has very recently revised the *Sturnidæ* of our modern English school, characterises the sub-typical or *Lamprotornine* group of them thus. "Bill more compressed and thrush-like, its base not angulated; the tip of the upper mandible distinctly notched." In the above characters I perceive some faint traces of our bird: but when I turn to the indication of the entire family, those traces seem obliterated, for "the conic straight bill, naked nostrils, and lengthened pointed wings," of the *Sturnidæ*, essentially conflict with the structure of our subject.

With these preliminary remarks I shall now attempt to characterise our bird, as the type of a new genus or sub-genus, either of the *Lamprotorninæ* or of the *Crateropodinæ*, as the learned shall please.

*Cútia nobis. Khutya* (quasi *Pedatus*) of the Nipalese.

Bill equal to the head, at base higher than broad, sub-arched and much compressed throughout; strong, entire\*, obtuse. Culmen considerably carinated between the nares, but not much produced among the soft and simple frontal plumes. Tomiæ erect, rather obtuse, and near to the palate. Nares broad-lunate, sub-basal closed above by a nude un-arched scale. Rictus moderate, smooth. Orbits and head plumose. Wings short, but firm; 5th quill usually longest; 2 first strongly—2 next, slightly gradated up to it. Tail short, quadrate and firm. Tarsi sub-elevate, very strong, nearly smooth. Toes compressed and ambulatory; lateral fores unequal, connected basally, the outer one as far as the joint; central not elongated; hind very large, sub-depressed and exceeding either of the lateral fores. Nails, compressed, strong, moderately bent, rather blunt†.

\* Entire in the majority of my full grown specimens, but in others there is a faint notch. This liability to vary perpetually occurs in *Cinclus*, in *Cinclosoma*, in *Cuculus*, and in *Timalia* (not to mention more); rendering the task of characterising *justly*, a work of time and labour in comparisons.

† So soon as the family and sub-family of our genus be determined, a great part of the above generic definition may be omitted relatively to such determination. At present the larger divisions sadly outrun the characters which should accompany and designate them. Vide SHAW'S General Zoology, vols. 13 and 14, where few of the larger divisions have any characters attached to them. Vide also the Regne Animal, Aves, wherein the subdivisions are indicated, *passim*, by two or three vague words!

Type *Cútia Nipalensis*, nobis.

Nos. 254, 255, of the new specimens and drawings in the possession of the Zoological Society. In order to illustrate the affinities of our bird, I proceed to compare it with *Pastor roseus* and with *Lamprotornis spilopterus*.

In *Pastor roseus* (as in all the typical *Pastors* in my possession) the bill is longer than the head, straight, conico-cylindric, and soft and feeble towards the base. Its gape is angulated; and the plumes of the head, carried forwards to the antea extremity of the oval nares, are pointed, glossed, and elongated. The ample and pointed wings, have the 1st quill bastard; the 2nd, very long and nearly equal to the 3rd, which is always the longest. The tarsi are strong, elevated and heavily scaled. The toes have the laterals and hind equal, and the central fore considerably elongated. The outer fore toe has a basal connexion with the central, but the inner is free.

In *Lamprotornis spilopterus* the wings have exactly the same form as in *Pastor roseus*; and, as this identical form is also found in *Eulabes religiosa*, (not to mention more typical *Pastors*;) it would seem to be characteristically and extensively significant\*. The bill of *Lamp. spilopterus*, which is scarcely longer than the head, uniformly sub-arcuated and not angulated at the gape, *so far* agrees with our *Cútia*. But its base is distinctly depressed, whilst forward it has a very slight compression and sub-cylindric outline. It is, besides, *sharply* pointed, *saliently* notched, and its trenchant fine tomia are *deeply interlocked*. Carry these peculiarities a little further and you have the bill of *Chloropsis*, which genus further agrees with *Lamprotornis spilopterus* almost entirely in the nature of the food of

\* The generic character of *Pastor* gives 'remex prima longissima:' but it is not so in my specimen of the type or *Roseus*: nor in any other typical *Pastor*, if *Pastor* be the equivalent for *Maina*. On the other hand, if *Acridotheres* be held to be that equivalent, the 'genæ plus minusve nudæ' is true of *Tristoïdes*, not true of *Cristelloïdes*, which two species are, however, as nearly allied as possible and perpetually associate together, every large flock of the former having many individuals of the latter. In other words, these genera are artificial and false; neither of them being capable of comprising consistently half a dozen of the most similar birds. The cheek piece *cannot* be an influential character, or one of the above named two species would not have it, and the other want it. By consequence, I should say, the genus *Eulabes* is purely artificial; for, bating the cheek piece, there is nothing left to distinguish the single species ranged under it, but a greater degree of thickness in a bill of exactly the same essential character.

Commend me to the old genus *Gracula*, sub-generically divided.

Our *Maina* is the prototype of the French *Martin* and of the English *Minor*.

the species, and in the structure of their stomachs. On the other hand, the harder, blunter, more solid, and uniformly compressed bill of *Cútia*, associated as it is with a subtritulating stomach and a diet consisting of hard insects and seeds, seems to affine our bird to *Pomatorhinus* and its allies.

In *Lamprotornis spilopterus* the nares are still short and round, though there be somewhat more approach to a nude membranous tect than in *Pastor roseus*.

In *Lamprotornis spilopterus* the tarsi are rather low, and the feet suited more to perching than to walking, the soles being flattish and the nails very acute. The lateral fores (of which the outer one only has a basal connexion) are shorter in proportion to the central, and longer in relation to the hind, than in our bird, which, by its longer legs, and full soled stout toes, provided with straighter and blunter nails, proclaims its more terrestrial habits, notwithstanding the basal connexion of the fore toes. Lastly, the pointed and burnished feathers upon the head of *Spilopterus* are wholly wanting in our bird.

In *Spilopterus* they seem to intimate relationship with the *Stares*: nor is the intimation unrequired; for the habits and essential structure of this species\*, when viewed in relation to whatever hath been, or can be justly, alleged of the *Sturnidæ*, savour more of contrast than of similitude. As for our *Cútia*, amidst all its anomalies (so to speak) of external structure, there is certainly something *Sturnine* in its aspect; and, by the formation of its feet and wings, as well as by its variegated plumage, it bears some resemblance to *Sturnella*; a genus "leading directly to the true starlings."

Species new. *Nipalensis* nobis. *Nipalese Cútia*, nobis.

Habitat, central and northern regions: adheres to the wilds, and feeds on hard seeds and hard ground insects.

*Colour and Size.* Male. Above, brilliant rusty yellow, with jet black remiges and rectrices: cap, and a large apert central portion of the wings, slaty; the former, confined all round by a black band

\* Quod est, structure of the chylopoetic viscera of the bill, and of the tongue, taken collectively.

In all these respects there is a strong tendency towards *Ixos*, *Chloropsis*, *Hypsipetes*, and others of the frugivorous arboreal and short-legged section of those most anomalous thrushes, the other or long-legged division of which seem to make some such approximation to the *Conirostres*, as the short-legged section does to the *Tenuirostres*. *CUVIER'S* *Philedones*, of which our *Sibia* may be taken as a perfect type—appear to unite these two very opposite sections. *Sibia Picaoides* has the tail and feet of *Pica*; and the bill and tongue of *Chloropsis*! But these are mysteries for the amply stored Museum and Library to solve!

proceeding through the eyes and ears from the nares. Below, from chin to legs pure white, from legs inclusively to tail, flavescent : the flanks broadly cross-barred with black : a spot of the same hue at the base of the maxilla : most of the quills and the lateral rectrices, tipped with white : lining of the wings and quills internally towards their bases, albescent : bill above blackish, below plumbeous : legs orange yellow : iris brown, 7 inches long by 11 wide, and 2 oz. in weight : bill  $\frac{1}{8}$  : tarsus  $1\frac{3}{8}$  : central toe  $\frac{1}{8}$  : hind toe  $\frac{1}{8}$ . The female is a trifle less in size : her mantle is variegated by longitudinal black drops ; and her cheek-band is brown instead of black.

2. *Indication of a new Genus of Waders, belonging to the Charadriatic Family.*

Most Indian sportsmen are aware that there are two species of wader, known to the natives by the common name of *Carvának* or *Carbának* ; one of which frequents dry sandy plains, and the other, sandy banks of rivers.

The former bird belongs to the genus *Ædicnemus* or *Thick-knee*, scarcely differing, as a variety, from the European type of that genus. But the latter, though possessing the same figure (even to the large head, with abrupt elevated forehead and great staring eye), as the other ; and though, moreover, resembling the other strictly in the form of the legs, wings and tail, yet differs from it *totally* in the structure of the bill.

This member, which in *Ædicnemus* has very much of the *Plover* form, in the river-haunting *Carvának* exhibits the strength and size so conspicuous in the *Storks* and *Jabirus*.

I find no generic mention of such a form in the works of Ornithology accessible to me ; and I therefore propose to characterise it as a new genus ; subject to the correction of those whose access to libraries and museums qualifies them to lay down the law in matters of this sort.

Order GRALLATORES. Family CHARADRIADÆ. Genus *Carvánaca*, nobis. Egacus  
Character.

Bill twice as long as the head, sub-recurved, strong, convex above, considerably compressed ; the base thickish and rounded ; the tomixæ very trenchant, locked, and denticulated and notched towards the tip, as in *Ardea*. Nares broad-linear and placed forward in a wide membranous fosse, extending  $\frac{1}{3}$  from the base to the tip of the culmen. Tongue long, narrow, fleshy : towards the point cartilaginous, and the point itself sub-bifid. Form of the head and body, of the feet, wings and tail, as in *Ædicnemus*.

Type *Carvánaca Grisea*, nobis. *Ædicnemus Magnirostris*, Hardwickii?

Specific character.

*Carvánac*. Above, a sky grey: below, together with the frontal zone, white. Brows, ear-coverts and mustaches, blackish. Shoulders, false wing, and coverts next them, together with the quills and tip of the tail, blackish. Wings and tail irregularly but largely banded with white, and both white for the most part, below. Length of the bird 20 inches, width 36, weight  $1\frac{1}{4}$  lbs.

The marks. This species inhabits the Bengal Presidency, very generally, being always found on the wide sandy banks of the larger rivers during the cold months of the year. It migrates to Tibet in summer, and passes over Népal on its way to and fro. Its food consists of crabs and other hard-shelled fish. Its intestines are from 22 to 25 inches long, with two cæca, each  $3\frac{1}{4}$  inches, placed at 5 inches from the lower end of the gut. The stomach is a strong triturating gizzard, fitted with the aid of gravel, to grind the hard parts of the bird's food.

Manners cannot well be more dissimilar than those of the desert and ripuary *Carvánacs*: the former adhering to dry arid plains, very much like the Indian Bustards\*; and the latter, as exclusively to the beds of rivers. Whoever will refer to the English CUVIER, (Aves. III. 307,) will perceive that our *species* is probably not unknown to science. Is it not the *Ædicnemus Magnirostris* of Hardwicke?

At the place quoted, two other allied species are cited, and these three may constitute the new genus or sub-genus *Carvánaca*, distinguished from *Ædicnemus* by totally different manners, and by a truly culthrostral bill.

It were well, indeed, if all new genera rested on diversities so marked as these—the manners so admirably tallying with the structure of that grand instrument of sustentation, the rostrum. Our genus, moreover, appears to me to constitute a remarkable and distinct link of connexion between the *Ardeidæ*, by means of *Mycteria* and the *Charadriadæ* through *Ædicnemus*. And it would, in my judgment, be quite as consonant to nature to confound *Ædicnemus* with *Charadrius*, as *Carvánaca* (nobis) with *Ædicnemus*.

The only consequence of HARDWICKE'S species proving to be the same with ours, ought therefore to be—not the rejection of the new genus, but—the merging of my specific name of *Grisea* in his of *Magnirostris*: unless indeed, the latter term be not held to have lost

\* It is frequently called by us the Bastard Florican.

its significance in relation to a genus as much distinguished for the strength and size of the bill, as any one of the *whole order*.

3.—*Indication of a new Genus of the Falconidæ.*

FALCONINÆ, Vigors. Genus new. *Báza*, nobis.

*Generic character.* Bill as in *Ierax*, but somewhat longer : upper mandible, with two sharp teeth on either side the hook, directed forwards : lower mandible with three or four smaller ones, on each side, correspondent to the former. Nares transverse, long, and linear, with the cere behind them membranous and free to base of bill. Legs and feet short and thick. Tarsi low, half plumed, coarsely reticulate. Toes short, cleft, inner fore and hind somewhat depressed and the latter large. Aeropodia wholly reticulate. Talons sub-equal, acute, squared below.

Wings long, equal to tail : 3rd quill longest.

Type. *Báza Syáma*, nobis.

In addition to the above significant particulars, (some of which may hereafter be omitted in the generic character,) I may add that the orbits, lore, and sides of the cere are clad in soft, composed plumage ; that the cere is short and nude above ; that the bill has great breadth and depth at the base, corresponding with the broad flat head and large eye of the true *Falcons*, and, both of which distinguish our bird no less ; that the first and second quills are but moderately gradated\*, and all three pretty sharply emarginated towards their tips, though not so near as in *Falco* or in *Ierax* ; that the tail is of medial length and square ; that the tongue is bifid ; and that, lastly, the feeble feet are remarkable for the sub-equality of the toes and talons, the roughness and levelness of the soles, and the size and depression of the thumbs. The complex affinities of this singular genus are obviously with *Cymindis*, *Harpagus* and *Ierax*. It is more nearly allied to the last, and its position (in VIGORS' arrangement of the *Falconidæ*) clearly is at the head of the *Falconinæ*, and leading from the genus *Gampsonix* to the genus *Ierax*. It differs from *Ierax* by its cymindian nares, its long wings, and its cleft toes, with unballied and depressed soles.

Species new. *Báza Syáma*, nobis.

Black, glossed with changeable blue or green : the belly and sides, rufous white, crossed by five or six broad bars of lake tinged ochreous red : outer web of the secondaries, the same hue—of the tertials,

\* 1st is  $1\frac{1}{2}$  inches, and the 2nd  $\frac{1}{2}$  an inch, less the 3rd : the rest rapidly fall off ; and the primaries exceed the tertiaries by nearly three inches. The scapulars are of good length.



white : scapulars and long coverts nearest them, whitened internally : a broad white gorget on the breast : remiges and rectrices plumbeous, for the most part, on the lower surface : legs and bill plumbeous : talons and tip of the bill, black : iris brown : a long slender drooping crest from the occiput : 13 inches long by 30 wide and 7 to 8 oz. in weight : bill,  $1\frac{1}{8}$  : tarsus,  $1\frac{1}{8}$  : central toe, 1.

Remarks. These birds are peculiar to the great forests of the lower region, so far as I yet know. The sexes are alike both in size and colours : both in young and moulting birds the leaden colour of the legs is lost in fleshy grey—that of the bill, in dusky grey ; and the powerful complex dentation of the bill, (both mandibles) is in the juniors only traceable as a festoon upon the upper mandible.

4.—*Indication of a new Genus of the Picipæ, with description of the type.*

*A new species, also, of two new species of the Genus Sitta.*

YUNXINÆ, Swainson. Genus new ; *Sasia*, nobis. *Sasya* of Nipal. Generic character.

Bill equal to the head, conico-compressed, pointed and entire : the base furnished with tufts of hair as in *Bucco*.

Nares round, basal, lateral, remote, and concealed. Tail short, soft and square ; wings equal to the tail, full, soft, first quill sub-bastard, 5 and 6, longest and equal ; tertials sub-equal to primaries.

Feet three-toed, hind toe stoutest, sub-equal in length to outer fore ; inner fore connected to first joint. Nails somewhat straightened and obtuse.

Tongue as in *Picus*.

Type, *Sasia ochracea*, nobis.

Species new. *Ochracea* ; *Ochreous* red *Sasia*.

*Form.* It has been described above. In further illustration of it we may, however, add that this singular bird has a close relationship with our *Vivia*, from which it differs by its rather longer and perfectly unangulated bill ; by its shorter, even tail ; by the *Bucco*-like tufts of its bill ; and, above all, by its three-toed feet, the nails of which have hardly any of the scansorial falcation and acuteness. Its orbits are nude, and it has a transverse corneous opercule before the eye.

*Colour and Size.* Subochreous red, with greenish yellow cap and wings ; a white streak from behind each eye ; and jet black unmarked tail.

Wings, internally, dusky ; on their lower surface towards the bases of the quills, as well as the lining of the wings, buff. Legs fleshy yellow : bill plumbeous with a dusky ridge : orbital skin plumbeous : iris brown : size very minute,  $3\frac{1}{2}$  inches by 7, and  $\frac{1}{3}$  oz. in weight ;

tarsus  $\frac{1}{8}$ : antea! outer toe  $\frac{7}{14}$ : its nail  $\frac{5}{14}$ : sexes alike: Habitat, forests of lower region.

*Remarks.* On a recent occasion I quoted *Vivia Nipalensis*, (nobis) as the smallest of the family\*. The above singular bird is still smaller, and both by its extraordinary form, and by its diminutive size, confirms the assertion then hazarded, that the vast forests of Nipal yield to none in the world in the number and variety of the Woodpecker tribe.

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CERTHIADÆ. Genus *Sitta* auctorum. Species new; *Corallina*, coral-billed *Sitta*, nobis.

Form, as in *Castaneovertris*†, but considerably smaller in size. Above, soft sub-cerulean blue, tinged with lilac on the cap: below, sordid greyish: chin white: forehead black: great quills and lateral rectrices, blackish; the latter, white-tipped: legs plumbeous grey: bill intense coral red; iris straw yellow:  $4\frac{3}{4}$  inches long by  $8\frac{1}{2}$  wide, and  $\frac{1}{2}$  oz. in weight: sexes alike. Habitat, central and northern regions.

Species 2nd, *Nipalensis*, nobis.

Above, saturate blue, darker than in *Castaneovertris* and with a purplish tinge; below, rufescent deepening as you descend the body, and showing full rusty on the lower flanks, vent, and inferior tail coverts: from the nostrils through the eyes to the shoulders, a black band: quills and lateral tail feathers, blackish: a white spot at the base of the two central rectrices; and the lateral ones blanched towards their tips: legs fleshy grey: bill dusky blue, changing to fleshy grey towards the base: iris dark brown: sexes alike: size of the precedent, and habitat the same.

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5.—New species of *Hirundinidæ*.

CYPSELUS. *Chatura*.

Species 1st. *Nudipes*, nobis.

Form and size. Bill typically cypseline with large vertical nares, wings exceedingly firm and long; 1st quill longest, more than two inches beyond the tail: tail shortish, quadrate, longer than the coverts, composed of ten very firm square-pointed feathers, the rigid straight shafts of which are produced into naked acute spines. Tarsi longer than any toe, nude, smooth. Toes longer and more unequal

\* A mistake, I find: for *Picus Minutus* is but  $3\frac{1}{2}$  inches long, or, precisely the size of our present subject.

† Also a Nipalese species: and these bills have therefore afforded three species to a genus previously limited to one—or, at most, two, if *Pectoralis* prove to be distinct.

than in *Cypselus*, with the hind one distinctly versatile. Talons strong and scansorial;  $8\frac{1}{2}$  inches from tip of bill to tip of tail, and 20 inches between the wings. Weight  $4\frac{1}{2}$  oz. Tarsus  $\frac{11}{16}$ , central toe  $\frac{1}{8}$ . Colour, head as far as the eyes and ears (inclusive), dorsal neck, sides, rump, upper tail coverts, wings and tail, dusky-black with a changeable blue or green gloss: chin, throat, and most part of the neck in front, confluent white: bottom of the neck, on the anteal surface, breast, and body below, sooty brown: vent, inferior tail-coverts, and a lateral stripe from the thighs, backwards to them, white, more or less picked out with blue glossed black: back and scapulars, whitey-brown: inner web of the last tertiaries, pure white: legs purpurescent dusky: bill black: iris dark-brown: sexes alike. The young want the blue or green gloss of maturity: the clear whitey-brown of the back and pure sooty brown of the belly are in them blended into an uniform dusky hue; and their throat is of a very sordid white.

Remark. This singular species, by the structure of its feet, opens a passage from *Hirundo* to *Cypselus*. Though variously allied to *Pelagia*, *Acuta*, *Caudacuta*, and *Gigantea*, it exhibits, I believe, a distinct type of form—being certainly not a *Chatura* as defined by STEVENS, nor a *Cypselus* of ILLIGER; far less a swallow. It climbs with great power aided equally by its talons and its tail. Its habitat is the northern region, whence it sometimes wanders into the mountains of the central, avoiding however the open and level country. I have set it down in my note book as the type of a new genus, called *Hirund-apus*.

Species 2nd. *Cypselus Nipalensis*, nobis.

Sooty black, glossed with green: chin, throat, and top of the neck in front, confluent white: a white bar across the rump: talons and bill, black: iris brown: nude part of toes, dusky-grey. Size small;  $5\frac{1}{2}$  by  $12\frac{1}{2}$  inches; and barely one oz. in weight: sexes alike: structure typical: tail, short and even.

Remark. This is the common Swift of the central region, where it remains all the year, building under thatched roofs, and against the beams of flat roofs. It lays two white eggs and breeds repeatedly.

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Genus *Hirundo*. Species 1st. *Nipalensis*, nobis.

Cap, back, scapulars and wing-coverts, brilliant deep blue: quills, tail feathers, and the longer tail coverts above and below, dusky: a narrow frontal zone, cheeks, neck, and body below, as well as the rump and lesser tail coverts above, rusty; paler and striped with narrow lines of dusky hue on the whole abdominal surface: dorsal

neck, more or less blotched with blue; rump, immaculate: bill, black: iris, dull brown: legs, fleshy-grey: sexes exactly alike: structure typical: tail long and deeply forked: size of *H. Rustica*.

Remark. This is the common *Swallow* of the central region, a household creature remaining with us for seven or eight months of the year.

Species 2nd. *Rupicola*, nobis.

Earthy grey brown: below, from the chin to the vent (exclusively), rufescent white: legs fleshy grey: bill black: iris brown: sexes alike: larger than the last,  $6\frac{1}{2}$  by  $14\frac{1}{2}$  inches, and weight  $1\frac{1}{2}$  oz.: structure typical: wings exceeding the short and subfurcate tail. Habitat, the central and northern regions: not migratory: adheres to the mountains, preferring rocky situations.

N. B. The remaining Hirundine birds of *Népal* are *Hirundo Rustica* and the Sand-Martin; both of which, but especially the latter, are common.

IV.—Description of the Shell and Animal of *Nematura*, a new Genus of Mollusca, inhabiting situations subject to alternations of fresh and brackish water. By W. H. BENSON, Esq. B. C. S.

*Animal*.—Caput tentaculis duobus setaceis oculis posticè prope bases tentaculorum sessilibus; proboscide elongatâ, cylindraceâ, extensili.

Pes ovato-oblongus, medio ventricosus, posticè angustatus, acuminatus, processu brevi filiformi subito desinens; anticè expansus, medio profundè emarginatus; alâ utroque latere porrectâ latè angustatâ, acuminatâ.

Testâ ovatâ, ventricosâ, à latere compressâ, ultimo anfractu insuper aperturam angulato, deflexo. Aperturâ integrâ constrictâ, orbiculari, suprâ vix angulatâ; peritremate acuto leviter intus incrassato. Operculo tenui in spiram planam convoluto.

The snout is capable of great extension, and the animal is able to lick the summit of the shell with its extremity, which is armed within the mouth with a pair of strong vertical jaws, each apparently consisting of two pieces: these are constantly in motion in a vertical direction. The centre of the foot has a rounded peltate appearance, occasioned by the adaptation of its form to that of the operculum, which is visible through the transparent foot when viewed on the under side. The singular short filiform process attached to the extremity of the foot appears to be the termination of a nerve or minute canal, which is seen extending directly up the centre of the foot until it is lost under the operculum. The excrement is voided from the right side of the animal.